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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,031	03/26/2001	Rabah Arhab	1200.465	3435

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EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 10/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/806,031

Applicant(s)

ARHAB ET AL.

Examiner

Melody M. Burch

Art Unit

3683

-- Th MAILING DATE of this communication appears on th cover sheet with th correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 08 August 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claims 1 and 26. The phrase "adapted to be coupled in rotation to a driving shaft, a turbine wheel..." in lines 2-3 is indefinite. It is unclear whether the "turbine wheel" is a component to which the transverse wall is coupled.

Re: claim 1. The phrase "an element" in line 3 from the bottom of the claim is indefinite. It is unclear to the Examiner as to the exact element Applicant is referring to.

Re: claim 26. The phrase "may be" in line 4 from the bottom of claim 26 is indefinite as they fail to define the metes and bounds of the claim.

The claims are replete with 112 issues. The above list includes examples of the issues and is not meant to be exhaustive.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5, 8, 9, 10, 11, 20 and 26-28 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5377796 to Friedmann et al.

Re: claims 1, 2, 5 and 20. Friedmann et al. show in figure 8 a hydrokinetic coupling apparatus for a motor vehicle comprising a casing as labeled by Examiner in the copy of figure 8 provided in the Response to Arguments section of this Office Action having a transverse wall as labeled and adapted to be coupled in rotation to a driving shaft, a turbine wheel 413 mounted within the casing and fixed to a hub 414,450 which is adapted to be coupled in rotation to a driven shaft, a fixed first surface as labeled on the transverse wall of the casing, and a lock-up clutch as shown interposed between the turbine wheel and the transverse wall and comprising a piston 435 carrying a second surface as labeled which lies facing the first surface capable of coupling it releasably to the transverse wall as the piston reciprocates axially, wherein a friction means 449 acts between a face of the piston as labeled opposed to the second surface and an element situated in facing relationship, characterized in that the piston is so configured as to carry the friction means as shown via element 451.

Re: claims 8, 9, 10, and 11. Friedmann et al. show rivet means 451 interposed between the friction means and the piston.

Re: claims 26, 27, and 28. Friedmann et al. show in figure 8 a hydrokinetic coupling apparatus for a motor vehicle comprising a casing as labeled by Examiner in attached copy of figure 8 having a transverse wall as labeled and adapted to be coupled in rotation to a driving shaft, a turbine wheel 413 mounted within the casing and fixed to a hub 414,450 which is adapted to be coupled in rotation to a driven shaft, a fixed first

Art Unit: 3683

surface as labeled on the transverse wall of the casing, and a lock-up clutch as shown interposed between the turbine wheel and the transverse wall and comprising a piston 435 carrying a second surface as labeled which lies facing the first surface capable of coupling it releasably to the transverse wall as the piston reciprocates axially, wherein the turbine wheel 413 includes an annular ring 413a which may be of divided form as best understood and which is fixed to the hub by means of a rivet 436a, and wherein a friction means 449 acts between the hub and the piston, characterized in that the piston is so configured as to carry the friction means as shown via element 451.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3, 4, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedmann et al. in view of US Patent 4177885 to Ross.

Re: claims 3 and 12. Ross teaches in the figure the use of a friction means 92 or a piston 44 having at least one projecting element (the end of element 92) being engaged in a complementary hole of the other one of the elements consisting of the piston and the friction means wherein the hole is blind. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the hole of the friction means to have been blind, in view of the teachings of Ross, in order

Art Unit: 3683

to provide an alternate means of securing the friction means to the piston that requires less drilling.

Re: claims 4 and 14. Friedmann et al., as modified, teaches a blind hole to the same extent as Applicant. The references are silent to the way in which the blind hole is formed, nevertheless, the patentability of this product-by-process claim is based on the product itself. Furthermore, since press-forming, drilling and extruding are old and well-known methods of producing holes, burden shifts to Applicant to show an unobvious difference that would result from the claimed processes. See MPEP 2113.

7. Claims 6, 7, 29, 30, 31, 32, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedmann et al.

Re: claims 6 and 7. Friedmann et al. show the through hole having an unspecified shape. Examiner maintains that It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shape of the hole to any appropriate size so as to be properly engageable with the at least one projecting element of the friction means or the piston. See *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Re: claims 29 and 30. Friedmann et al. show the thickened portion having a tapered width. Examiner maintains that It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the shape of the thickened portion to any appropriate shape including a constant width so as to be properly engageable with the friction means. See *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Art Unit: 3683

Re: claims 31, 32, 35. The reference is silent to the way in which the friction means is connected to the thickened portion, nevertheless, the patentability of this product-by-process claim is based on the product itself. Furthermore, since molding and snap-fitting are an old and well-known methods of producing a connection, burden shifts to Applicant to show an unobvious difference that would result from the claimed processes. See MPEP 2113.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Friedmann et al. in view of US Patent 4844222 to Casse et al. Casse et al. teaches the use of a washer or friction means 37 made of synthetic material in col. 4 lines 1-2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the material of the friction means of Friedmann et al. to have included synthetic material, as taught by Casse et al., in order to provide a particular coefficient of friction depending on the desired amount of relative movement and manufacturing factors such as material availability and cost.

9. Claim 15 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Friedmann et al. Friedmann et al. shows in figure 8 the friction means located over a projected portion of the piston to the same extent as Applicant. The reference is silent to the way in which the friction means is connected to the projecting portion, nevertheless, the patentability of this product-by-process claim is based on the product itself. Furthermore, since molding is an old and well-known method of producing a connection, burden shifts to Applicant to show an unobvious difference that would result from the claimed processes. See MPEP 2113.

Art Unit: 3683

10. Claims 16, 17, 18, 21, 22, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedmann et al. in view of Blomquist.

Re: claims 16, 17, 18. Blomquist teaches the use of snap-fitting means or lugs 80 being configured to snap fit in col. 3 lines 13-14. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the connection between the piston and the friction means of Friedmann et al. to have included snap-fitting means, as taught by Blomquist, as an alternate means of connecting to elements together depending on manufacturing factors such as assembly and cost requirements.

Re: claims 21 and 22. The reference is silent to the way in which the friction means is connected to the projecting portion, nevertheless, the patentability of this product-by-process claim is based on the product itself. Furthermore, since molding is an old and well-known method of producing a connection, burden shifts to Applicant to show an unobvious difference that would result from the claimed processes. See MPEP 2113.

Re: claim 23. Friedmann et al. show the friction means consisting of a ring or an encircling (surrounding) arrangement as shown by virtue of the hole through which the portion 451 passes.

Re: claim 24. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the ring or encircling arrangement to have included a plurality of sectors as opposed to one integral piece depending on such

Art Unit: 3683

manufacturing factors as assembly and cost requirements. See *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965).

Allowable Subject Matter

11. Claims 19, 25, 33, 34, 36-44 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments filed 8/8/02 have been fully considered but they are not persuasive.

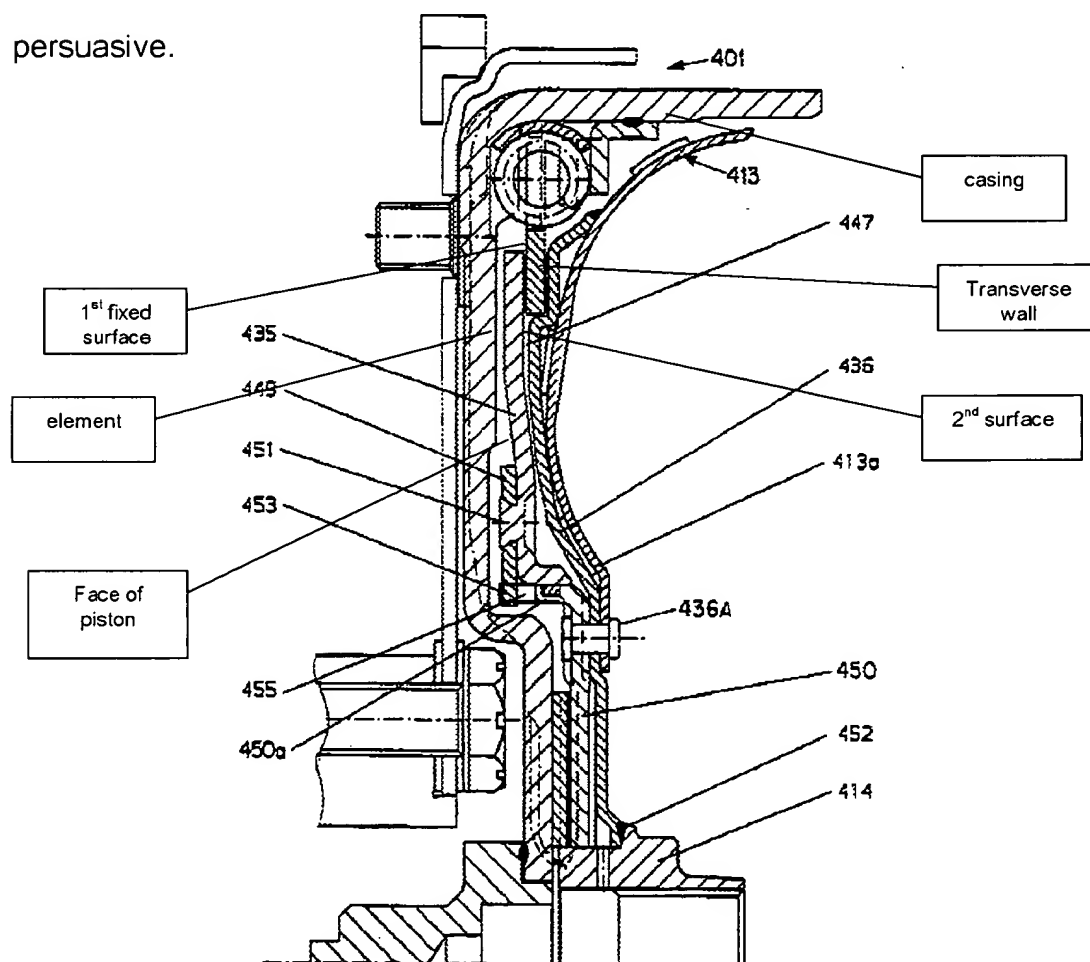


Fig. 8

Art Unit: 3683

As shown in the copy of figure 8 in the previous page, Fiedmann et al. shows a fixed first surface on the transverse wall of the casing, portions of a lock-up clutch shown interposed between the turbine wheel and the transverse wall, the piston carrying a second surface which lies facing the first surface capable of coupling it releasably to the transverse wall as the piston reciprocates axially via element 455 wherein the friction means acts between a face of the piston opposed to the second surface and an element or a second transverse wall of the casing situated in facing relationship. Examiner maintains that, as broadly claimed, element 449 is a friction means as the portions 453 of element 449 are made such that they are free to move in sockets or recesses 455 in which the portions 453 are received. Accordingly, the rejections based on Friedmann et al. are maintained.

Conclusion

13. In order to complete the record, it should be noted that no conflict appears to presently exist between the subject matter defined by the instant claims and the subject matter of the claims of applicant's and/or assignee's copending application no. 09/806029 has been made of record. Accordingly, no double patenting rejection is entered into the instant application. See MPEP 804+ concerning double patenting type of rejections, if necessary. Applicant and/or assignee should maintain this clear line of patentable distinction between the instant claims and the claims of the indicated patent application.

Art Unit: 3683

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melody M. Burch whose telephone number is 703-306-4618. The examiner can normally be reached on Monday-Friday (7:30 AM-4:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Application/Control Number: 09/806,031

Page 11

Art Unit: 3683

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October 17, 2002

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10/18/02